

RECEIVED

AUG 21 2002

TECH CENTER 1600/2900



1600

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/341,894

DATE: 08/14/2002

TIME: 14:41:55

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\08142002\I341894.raw

```

5 <110> APPLICANT: Piechaczyk, Marc
6   Noel, Daniele
8 <120> TITLE OF INVENTION: Biological material for treating a mammal by antibody gene
transfer and
9   pharmaceutical composition containing same
11 <130> FILE REFERENCE: 19904-002
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/341,894
C--> 14 <141> CURRENT FILING DATE: 1999-12-15
16 <150> PRIOR APPLICATION NUMBER: FR97/00540
17 <151> PRIOR FILING DATE: 1997-01-20
19 <160> NUMBER OF SEQ ID NOS: 4
21 <170> SOFTWARE: PatentIn version 3.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 420
25 <212> TYPE: DNA
26 <213> ORGANISM: Mus musculus
28 <220> FEATURE:
W--> 29 <221> NAME/KEY: CDS<222> (1)..(420)
30 <223> OTHER INFORMATION:
32 <220> FEATURE:
W--> 33 <221> NAME/KEY: misc_feature<222> (1)..(420)
34 <223> OTHER INFORMATION: Sequence coding for the variable region of the antibody heavy
ch
35   ain
37 <220> FEATURE:
W--> 38 <221> NAME/KEY: sig_peptide<222> (1)..(57)
39 <223> OTHER INFORMATION:
41 <400> SEQUENCE: 1
42 atg ggt tgg ctg tgg aac ttg cta ttc ctg atg gca gct gcc caa agt      48
43 Met Gly Trp Leu Trp Asn Leu Leu Phe Leu Met Ala Ala Ala Gln Ser
44 1          5          10          15
46 gcc caa gga cag atc cac ttg gta cag tct gga cct gag ctg aag aag      96
47 Ala Gln Gly Gln Ile His Leu Val Gln Ser Gly Pro Glu Leu Lys Lys
48          20          25          30
50 cct gga gag aca gtc aag atc tcc tgc aag gct tct ggg tat acc ttc      144
51 Pro Gly Glu Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe
52          35          40          45
54 aca tcg tat ggc ttg acc tgg gtg ata cag tct cca gga aag gat tta      192
55 Thr Ser Tyr Gly Leu Thr Trp Val Ile Gln Ser Pro Gly Lys Asp Leu
56          50          55          60
58 aaa tgg atg ggc tgg ata aac acc ttc tct gga gtg cca aca tat gct      240
59 Lys Trp Met Gly Trp Ile Asn Thr Phe Ser Gly Val Pro Thr Tyr Ala
60 65          70          75          80
62 gat gac ttc aag gga cgc ttt gcc ttc tct ttg gac acc tct acc agc      288

```

63 Asp Asp Phe Lys Gly Arg Phe Ala Phe Ser Leu Asp Thr Ser Thr Ser

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/341,894

DATE: 08/14/2002

TIME: 14:41:55

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\08142002\I341894.raw

```

64      85      90      95
66 act gcc tat ttg cag atc gac aac ctc aaa aat gag gac acg gct aca      336
67 Thr Ala Tyr Leu Gln Ile Asp Asn Leu Lys Asn Glu Asp Thr Ala Thr
68      100      105      110
70 tat ttc tgt tca aga agg ggg ggt ttt att act acg gct ctt gac acc      384
71 Tyr Phe Cys Ser Arg Arg Gly Gly Phe Ile Thr Thr Ala Leu Asp Thr
72      115      120      125
74 tgg ggc caa ggc acc tct ctc aca gtc tcc tca gcc      420
75 Trp Gly Gln Gly Thr Ser Leu Thr Val Ser Ser Ala
76      130      135      140

```

79 <210> SEQ ID NO: 2

80 <211> LENGTH: 140

81 <212> TYPE: PRT

82 <213> ORGANISM: Mus musculus

84 <220> FEATURE:

W--> 85 <221> NAME/KEY: misc_feature<222> (1)..(420)

86 <223> OTHER INFORMATION: Sequence coding for the variable region of the antibody heavy
ch

87 ain

89 <400> SEQUENCE: 2

91 Met Gly Trp Leu Trp Asn Leu Leu Phe Leu Met Ala Ala Ala Gln Ser

92 1 5 10 15

95 Ala Gln Gly Gln Ile His Leu Val Gln Ser Gly Pro Glu Leu Lys Lys

96 20 25 30

99 Pro Gly Glu Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe

100 35 40 45

103 Thr Ser Tyr Gly Leu Thr Trp Val Ile Gln Ser Pro Gly Lys Asp Leu

104 50 55 60

107 Lys Trp Met Gly Trp Ile Asn Thr Phe Ser Gly Val Pro Thr Tyr Ala

108 65 70 75 80

111 Asp Asp Phe Lys Gly Arg Phe Ala Phe Ser Leu Asp Thr Ser Thr Ser

112 85 90 95

115 Thr Ala Tyr Leu Gln Ile Asp Asn Leu Lys Asn Glu Asp Thr Ala Thr

116 100 105 110

119 Tyr Phe Cys Ser Arg Arg Gly Gly Phe Ile Thr Thr Ala Leu Asp Thr

120 115 120 125

123 Trp Gly Gln Gly Thr Ser Leu Thr Val Ser Ser Ala

124 130 135 140

127 <210> SEQ ID NO: 3

128 <211> LENGTH: 420

129 <212> TYPE: DNA

130 <213> ORGANISM: Mus musculus

132 <220> FEATURE:

133 <221> NAME/KEY: CDS

134 <222> LOCATION: (1)..(420)

135 <223> OTHER INFORMATION:

137 <220> FEATURE:

W--> 138 <221> NAME/KEY: misc_feature<222> (1)..(420)

139 <223> OTHER INFORMATION: Sequence coding for the variable region of the antibody
light ch

140 ain

RAW SEQUENCE LISTING

DATE: 08/14/2002

PATENT APPLICATION: US/09/341,894

TIME: 14:41:55

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\08142002\I341894.raw

142 <220> FEATURE:

143 <221> NAME/KEY: sig_peptide

144 <222> LOCATION: (1)..(57)

145 <223> OTHER INFORMATION:

147 <400> SEQUENCE: 3

148 atg aag ttg cct ggt agg ctg ttg gtg ctg atg ttc tgg att cct gct 48

149 Met Lys Leu Pro Gly Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala

150 1 5 10 15

152 tcc aat agt aat gtt gtg atg acc caa act cca ctc tcc ctg tct gtc 96

153 Ser Asn Ser Asn Val Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val

154 20 25 30

156 agt ctt gga gat caa gcc tcc atc tct tgc aga tct agt cag agc att 144

157 Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile

158 35 40 45

160 gta cat agt aat gga aac acc tat tta gaa tgg tac ctg cag aaa cca 192

161 Val His Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro

162 50 55 60

164 ggc cag tct cca aag ctc ctg atc tat aaa gtt tcc aac cga ttg tct 240

165 Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Leu Ser

166 65 70 75 80

168 ggg gtc cca gac agg ttc agt ggc agt gga tca ggg aca gac ttc aca 288

169 Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr

170 85 90 95

172 ctc aaa atc agc aga gtg gag gct gag gat ctg gga ctt tat tac tgt 336

173 Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Leu Tyr Tyr Cys

174 100 105 110

176 ttt caa ggt tca cat att cca ttc acg ttc ggt tgc ggg aca aag ttc 384

177 Phe Gln Gly Ser His Ile Pro Phe Thr Phe Gly Ser Gly Thr Lys Phe

178 115 120 125

180 gaa ata aaa cgg gct gat gct gca cca act gta tcc 420

181 Glu Ile Lys Arg Ala Asp Ala Ala Pro Thr Val Ser

182 130 135 140

185 <210> SEQ ID NO: 4

186 <211> LENGTH: 140

187 <212> TYPE: PRT

188 <213> ORGANISM: Mus musculus

190 <220> FEATURE:

191 <221> NAME/KEY: misc_feature

192 <222> LOCATION: (1)..(420)

193 <223> OTHER INFORMATION: Sequence coding for the variable region of the antibody

light ch

194 ain

196 <400> SEQUENCE: 4

198 Met Lys Leu Pro Gly Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala

199 1 5 10 15

202 Ser Asn Ser Asn Val Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val

203 20 25 30

206 Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile

207 35 40 45

210 Val His Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/341,894

DATE: 08/14/2002

TIME: 14:41:56

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\08142002\I341894.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:29 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1
L:33 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1
L:38 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1
L:85 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:2
L:138 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3